Veterinary Laboratory

Laboratory Sample Submission Guide

1 May 1998

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PURPOSE. This submission manual provides instructions for collecting and submitting samples to DOD Veterinary Laboratories, and describes which laboratories should be used. It also provides a list and description of the various tests provided by the laboratories.

LABORATORY LOCATIONS

1. Four laboratories provide veterinary laboratory services for the Department of Defense. Refer to the listing below for laboratory addresses, phone numbers and areas supported.

2. Samples should be submitted to the laboratory that supports your geographical area or that provides the specific service required. For additional information, contact the area laboratory providing support.

LABORATORY	AREAS SERVICED
Department of Defense Veterinary Laboratory ATTN: MCVS SC VL 2472 Schofield Rd Bldg 2632 Fort Sam Houston, TX 78234-6232 DSN: 421-4604/4761 Comm: 210-295-4604/4761 Sample receiving area: -4210 FAX: 210-270-2559	Continental United States, Caribbean, Pacific Rim.
Schofield Barracks Br VET SVCS TAMC ATTN: Food Analysis Lab Bldg 673 Glennen Road Schofield Barracks, HI 96857-5460 FAX: 808-433-8553 Comm: 808-433-8550	Hawaii and parts of SE Asia
U.S. Army Veterinary Laboratory-Europe 100 Medical Detachment (VS-HQ) Bldg 3810 APO AE 09180-3619 ETS: 371-2805/2703 Comm: (GE, Landstuhl; 011-49622117-2805) FAX: 011-49622130-0269	Europe, Mideast, and Africa

Sampling and Shipping Laboratory Samples
General Information

1. Samples submitted must be representative of the sample population being tested. If a customer complains about a particular lot of an item it will not do any good to test another lot unless it exhibits the same problems.

2. Is the testing really necessary and cost effective? How many of the same item remain in stock? Would it be better to dispose of the few remaining items than spend many dollars in shipping costs and more in laboratory costs?

3. Include a complete product history with all shipments (other than samples submitted in conjunction with routine sanitary inspections or under the AR 40-70 program). The more information you provide the laboratory, the faster and more accurately we will be able to test your samples.

4. Pack samples to prevent damage during transit. Individual samples should be placed in separate plastic bags (zip-lock works best) to prevent leakage from inside out and outside in. Serum and blood tubes must be protected from breakage. Wrap them with plastic bubble wrap or gauze pads and then place in a plastic bag.

5. Ship perishable items in an insulated container with refrigerant.

a. Pre-cool chilled products to 2°C.

b. Maintain the correct temperature during transit by using sufficient refrigerant.

c. If using chemical ice packs, they must be frozen prior to use. Refrigerating them does not get them cold enough.

d. If using wet ice, place it in heavy plastic bags that will contain the water produced when the ice melts. Do not place products in the same bag with the ice.

e. Do not use dry ice to ship chilled products.

f. Chilled shipments must contain a temperature pilot sample similar in type to the samples being submitted. Label the pilot sample as such.

g. Dry ice is required to keep frozen samples frozen during shipment. Frozen chemical ice packs will not keep frozen items frozen.

6. When shipping heavy or bulky items such as large cans or gallon jars of salad dressing, pack the items carefully. Use extra packing material and if necessary, ship in several boxes rather than one very heavy one. If the items are swollen, place in plastic bags to contain any leakage.

7. Ship perishable samples by express/overnight - next day delivery. Whenever possible, do not ship chilled/frozen samples on Thursday for Friday delivery. The laboratories are not

staffed to receive samples on weekends. Therefore, if the samples are not delivered on Friday (for whatever reason), they will probably not be testable when they are finally received the following Monday.

8. Notify the laboratory whenever a shipment is made. Notification can be telephonic or electronic (cc:Mail, LotusNotes, FAX, etc.). Include the name of the carrier and tracking number, if known. If shipping by commercial air, provide the airbill number, flight numbers and estimated time of arrival (ETA).

9. When shipping via Air Mobility Command, phone the laboratory and provide the Transportation Control Number (TCN) and ETA. Send AMC shipments "Signature Service".

10. If shipping meats or fresh fruits/vegetables from overseas to the CONUS or Hawaii lab, a USDA import permit must accompany the shipment. Contact the receiving laboratory for a copy of the permit. See the USDA permits for specific restrictions.

11. All test request forms must include the DSN and commercial phone numbers for the submitting station, and a point of contact.

Fresh Dairy Products, Whole Milk, Low-Fat Milk, Skim Milk, Flavored Milks, Creams (heavy, light, half & half), Eggnog

1. Sample selection:

a. Send samples in their unopened original containers.

b. Send at least 8 oz of sample.

c. Enclose each container in a separate plastic bag to contain leakage.

d. **Do not tape the tops of the containers.**

e. Fresh dairy in quart, half gallon and gallon containers should be placed in the shipping carton upright. They are much less likely to leak than when laid on their sides. Use caution not to crush them by placing too much weight (ice or gel packs) on top.

f. Test request forms should include the **date of pasteurization** for **fluid dairy** samples and the **package code date** for **other products**.

g. Collect and ship samples ASAP after pasteurization. Fluid dairy samples must be received within 72 hrs of pasteurization if keeping quality is to be done.

2. Routine Testing

Microbiological: standard plate count, coliform count, keeping quality (P.I.)
Chemical: phosphatase

3. Tests Available

Microbiological: standard plate count, coliform count, YMC, keeping quality (P.I.), Lipolytic count

Chemical: phosphatase, fat, total solids, solids-not-fat, pH, acidity, added water/freezing point, hypochlorites, protein reducing substance, vitamins A & D, antibiotics

4. Pilot Sample

Like item is required

5. Remarks:

Fluid/chilled dairy samples received **FROZEN** or **TOO WARM** (greater than 10°C) at the laboratory will not be tested. Samples received at 4.5 to 10°C will be tested but microbiological results will be unofficial. Results of samples received at 0 to 4.4°C are official.

Soft Serve Ice Cream/Yogurt Mixes

1. Sample selection:

a. Send samples in their unopened original containers.

b. Send at least 8 oz of sample.

c. Enclose each container in a separate plastic bag to contain leakage.

d. **Do not tape the tops of containers.**

e. Quart, half gallon and gallon containers should be placed in the shipping carton upright. They are much less likely to leak than when laid on their sides. Use caution not to crush them by placing too much weight (ice or gel packs) on top.

2. Routine Testing

Microbiological: standard plate count, coliform count, / coliform count, YMC

3. Tests Available

Microbiological: standard plate count, coliform count, YMC, Fat, Acidity, pH

4. Pilot Sample

Like item is required

5. Remarks:

Fluid/chilled samples received **FROZEN** or **TOO WARM** (greater than 10°C) at the laboratory will <u>not</u> be tested. Samples received at 4.5 to 10°C will be tested but microbiological results will be unofficial. Results of samples received at 0 to 4.4°C are official. Some contracts allow for product to be delivered frozen. Please indicate this on sample submission form.

Cultured Dairy Products, **Buttermilk & Acidophilis Milk, Sour Cream, Cottage Cheese, Chilled Yogurt**

1. Sample selection:

a. Send samples in their unopened original containers.

b. Send at least 8 oz of sample.

c. Enclose each container in a separate plastic bag to contain leakage.

d. Tape the Lid on tub type containers. **Do not tape the tops of milk type containers.**

e. Samples in quart, half gallon and gallon containers should be placed in the shipping carton upright. They are much less likely to leak than when laid on their sides. Use caution not to crush them by placing too much weight (ice or gel packs) on top.

2. Routine Testing

Microbiological: coliform count

3. Tests Available

Microbiological: coliform count
Chemical: phosphatase, fat, milk-solids-not-fat, acidity, pH

4. Pilot Sample

Like item required

5. Remarks:

Fluid/chilled dairy samples received **FROZEN** or **TOO WARM** (greater than 10°C) at the laboratory will not be tested. Samples received at 4.5 to 10°C will be tested but microbiological results will be unofficial. Results of samples received at 0 to 4.4°C are official.

Cheese

1. Sample selection:

a. Send samples in their unopened original containers.

b. Send at least 8 oz of sample.

c. Enclose each container in a separate waterproof bag to contain leakage.

2. Routine Testing

Pathogens only

3. Tests Available

Microbiological: fecal coliform count, EEC count, enterococcus count, YMC, *S.aureus* count

Chemical: fat, moisture, phosphatase, salt, pH, aflatoxins, diamines

4. Pilot Sample

Like item required

5. Remarks:

Sample should be submitted in a chilled state.

Salads & Spreads

1. Sample selection:

a. Submit a minimum of 4 oz. (100 g.)

b. If the original container is more than 1 lb. or when sampling bulk items -- aseptically remove a sample and place 4 oz. in a sterile specimen container. Tighten and tape lid. Label the container, not the lid.

c. Place individual samples in a plastic bag to contain leakage.

2. Routine Testing

APC, coliform MPN, fecal coliform MPN, *E. coli* MPN, *S. aureus* count, *Salmonella*, *Listeria monocytogenes*, YMC, pH & B.*cereus*

3. Tests Available

APC, coliform MPN, fecal coliform MPN, *E. coli* MPN, *S. aureus* count, *Salmonella*, *Listeria monocytogenes*, YMC, pH & B.*cereus*

4. Pilot Sample

Like item is required

5. Remarks:

Chilled samples received **FROZEN** or **TOO WARM** (greater than 10°C) at the laboratory will <u>not</u> be tested. Samples received at 4.5 to 10°C will be tested, but microbiological results will be unofficial. Results of samples received at 0 to 4.4°C are official.

Sandwiches

1. Sample selection:

a. Microbiological testing requires a minimum of 100 grams of components (MEAT, CHEESE, ETC., excluding the bread). If necessary, submit two sandwiches as one sample (give them the same sample number).

b. Place wrapped sandwiches in separate plastic bags to protect them from leakage and contamination. Pack carefully to prevent crushing.

2. Routine Testing

APC, coliform MPN, fecal coliform MPN, *E. coli* MPN, *S. aureus* count, *Salmonella, Listeria monocytogenes*, YMC

3. Tests Available

APC, coliform MPN, fecal coliform MPN, *E. coli* MPN, *S. aureus* count, S*almonella, Listeria monocytogenes*, YMC

4. Pilot Sample

Like item is required

5. Remarks:

Chilled samples received **FROZEN** or **TOO WARM** (greater than 10°C) at the laboratory will not be tested. Samples received at 4.5 to 10°C will be tested, but microbiological results will be unofficial. Results of samples received at 0 to 4.4°C are official.

Tofu

1. Sample selection:

a. Submit a minimum of 4 oz. (100 g.)

b. If the original container is more than 1 lb. or when sampling bulk items -- aseptically remove a sample and place 4 oz. in a sterile specimen container. Tighten and tape lid. Label the container, not the lid.

c. Place individual samples in a plastic bag to contain leakage.

2. Routine Testing

APC, *E. coli* MPN, *S. aureus* count, *Salmonella*, *Listeria monocytogenes*, Y.*entercoliticus*

3. Tests Available

APC, *E. coli* MPN, *S. aureus* count, *Salmonella*, *Listeria monocytogenes*, Y.*entercoliticus*

4. Pilot Sample

Like item is required

5. Remarks:

Chilled samples received **FROZEN** or **TOO WARM** (greater than 10°C) at the laboratory will not be tested. Samples received at 4.5 to 10°C will be tested, but microbiological results will be unofficial. Results of samples received at 0 to 4.4°C are official.

Ground Beef/Trimmings

1. Sample selection:

a. Submit at least 4 oz. for microbiological testing.

b. Submit at least 1 lb. for fat testing.

2. Routine Testing

As requested

3. Tests Available

Microbiological: APC 20°C 72h, fecal coliform MPN

Chemical: fat, soy flour, soy protein, diamines, dry milk, sulfites, malonaldehyde/TBA, pesticides, volatile acids, antibiotics

4. Pilot Sample

Like item required for Micro testing

5. Remarks:

Submit chilled or frozen.

Environmental Samples

1. Sample selection:

Submit environmental samples on MEDCOM Form 676-R. Refer to Appendix 1 for sample forms and completion instructions.

The sponge or swab sampling methods can be used to evaluate cleanliness and sanitation of food contact surfaces in commissaries and dining facilities. A larger surface area can be sampled using the sponge method.

a. Upon request, the laboratory will provide the sterile swabs, sponge kits and a sampling SOP.

b. Immediately after sampling, sponge and/or swab containers must be shipped chilled to the laboratory on wet ice or frozen gel packs.

c. Ship for overnight delivery since testing must be done within 24 hours of sampling if results are to be valid.

d. Maintain temperature at 0 to 4.4°C during transit.

e. Describe the size of the surface area sampled and what piece of equipment was tested.

2. Pilot Sample

Blank tube with diluent (provided by lab)

Ice Cream/Frozen Yogurt

1. Sample selection:

a. Containers of 1/2 gallon or less -- send unopened original container, minimum 4 oz.

b. Containers larger than 1/2 gallon -- aseptically remove a sample and place 4 oz. in a sterile specimen container. Tighten and tape lid. Label the container, not the lid. Place the sample in a plastic bag to contain leakage.

2. Routine Testing

Microbiological: standard plate count, coliform count, /coliform count, Y & M (yogurt)

Chemical: phosphatase

3. Tests Available

Microbiological:standard plate count,coliform count,*S.aureus* count, *Salmonella*

Chemical: phosphatase, fat, milk-solids-not-fat

4. Pilot Sample

Not Required

5. Remarks:

Samples must remain frozen **-- SHIP WITH DRY ICE ONLY.**

Sherbet

1. Sample selection:

a. Containers of 1/2 gallon or less -- send unopened original container, minimum 4 oz.

b. Containers larger than 1/2 gallon -- aseptically remove a sample and place 4 oz. in a sterile specimen container. Tighten and tape lid. Label the container, not the lid. Place the sample in a plastic bag to contain leakage.

2. Routine Testing

Microbiological: standard plate count, coliform count,

3. Tests Available

Microbiological: standard plate count, coliform count

4. Pilot Sample

Not Required

5. Remarks:

Samples must remain frozen -- **SHIP WITH DRY ICE ONLY.**

Novelties

1. Sample selection:

a. Send a minimum of 3 units of the same item

b. Place in bag to protect from contamination

2. Routine Testing

Microbiological: standard plate count, coliform count,

3. Tests Available

Microbiological: standard plate count, coliform count

4. Pilot Sample

Not Required

5. Remarks:

Samples must remain frozen -- **SHIP WITH DRY ICE ONLY**.

Make sure product packaging material does not contact the dry ice directly, this causes the packaging to become brittle and tear.

UHT Milk

1. Sample selection:

a. Ship 6 containers or packages (3 normal and 3 abnormal). If samples are small, ship 12 (6 normal/6 abnormal).

b. Label packages as "normal" or "abnormal."

c. Be sure to indicate the date of pack or code date on the laboratory request.

2. Routine Testing

Microbiological: APC, anaerobic plate count, DMC, pH, appearance, and condition

Chemical: dye leak

3. Tests Available

Microbiological: APC, anaerobic plate count, DMC, pH, appearance, and condition

Chemical: dye leak

4. Pilot Sample

Not required

5. Remarks

Make sure that you provide all inspection data or customer complaint information with sample request.

Canned Items

1. Sample selection:

a. Ship 6 cans or packages (3 normal and 3 abnormal). If samples are small, ship 12 (6 normal/6 abnormal).

b. Label cans or packages as "normal" or "abnormal."

c. Be sure to indicate the date of pack or code date on the laboratory request.

2. Routine Testing

As required

3. Tests Available

Commercial sterility/spoilage (aerobic & anaerobic cultures 35°C & 55°C), DMC, physical exam, vacuum/pressure, pH, dye leak, net weight/volume, headspace gas, net headspace, percent fill, appearance, odor, Hydrogen swell: vacuum/pressure, headspace gas, metals (iron and tin)

4. Pilot Sample

Not required

5. Remarks:

Please provide all pertinent inspection history associated with product submitted

Bottled water

1. Sample selection:

a. Pesticide samples

Use glass bottles with screw caps (teflon, aluminum, or enamel-lined), or wrap in heavy duty aluminum foil. Containers and caps must be clean and dry before adding the samples.

DO NOT use **PLASTIC** bottles or bags to store/ship pesticide samples. Plastics may absorb the pesticides and will add interfering substances to the sample.

Pesticide samples should be drawn from the line prior to product being bottled. Sample at least one (1) liter of product in a clean glass container.

b. Heavy Metals and Microbiological samples

Use end item container at least a one- (1) liter sample.

2. Routine Testing

Microbiology: HPC, Coliforms, *P aeruginosa*

3. Tests Available

APC, coliforms, *P. aeruginosa*, fecal streptococci, sulfite-reducing anaerobes
Heavy metals and pesticides

4. Pilot Sample

Not required

5. Remarks:

If you are going to submit samples to the laboratory for heavy metals and pesticide testing you should call or E-mail the lab for guidance and additional instructions.

Diagnostic Samples (Animal Specimens)

Rabies Diagnosis

Submit all requests for rabies diagnosis testing on DD Form 2620, "Request for and Report of Laboratory Rabies Test" .

1. **Preparation of Specimen**

a. Decapitate the animal and place the head in a plastic bag and seal. Place the sealed specimen in a second heavy plastic bag and seal the second bag. Refrigerate immediately.

b. Send the entire carcass of small animals such as bats.

c. Freezing animal specimens is not recommended unless a delay in shipment is expected.

d. Wild animals and unowned dogs and cats that have exposed a person should be euthanized immediately upon capture and submitted for testing.

2. **Packing Shipping Containers**

a. Add sufficient refrigerant to an insulated shipping container to maintain a temperature of 0 to 4°C during transit.

b. Use drip-free gel packs as a refrigerant. Pack refrigerant in a separate bag than the sample. **Liquid must not leak from the shipping container during transit!**

3. **Labeling Shipping Containers and Shipping Documents**

a. Animal specimens for rabies diagnosis are considered DIAGNOSTIC specimens. Special labeling is not required for shipment of diagnostic specimens. **DO NOT** label the exterior of the shipping container as a "rabies specimen".

b. If specimen is being shipped by air or bus, place the telephone numbers of the laboratory on the address label for pickup at the destination airport or bus terminal, e.g., "For destination pickup, call (210) 916-7904 during work hours."

c. The phrase **"Diagnostic Specimen - Animal"** should be used on all transportation documents (GBL, Airbill, etc.) to describe the specimen shipped. **DO NOT** mention “rabies”.

d. Place the completed DD Form 2620 in a sealed plastic bag and place it on top, between the inner and outer containers. Affix a copy of the request form, in an envelope, to the top of the outer shipping container. Be sure to include a point of contact. Include duty and after-duty phone numbers for that individual.

4. **Method of Shipment**.

Ship by the most expeditious means (overnight, next day delivery). Notify the laboratory by telephone as soon as the specimen has been shipped and provide the following:

a. Type of animal

b. Was human exposure involved?

c. Method of shipment and ETA

Serological Samples

1. General Instructions

a. Before shipping specimens, ensure the laboratory performs the test desired and that the correct test request form is available. If in doubt, **CALL** the laboratory **PRIOR** to sample shipment.

b. Testing of specimens from privately owned animals is limited to diseases and conditions that present a health threat to the community.

c. Collect blood samples (2 to 3 mL) in a sterile tube; allow blood to clot. Avoid hemolysis and lipemia. Transfer serum to **polypropylene vials** having watertight screw-caps.

d. Label each serum tube with the animal's identification data. Data on the tubes should correspond with the data on the appropriate laboratory test request form. Be sure the form includes a **COMPLETE** return address and telephone number.

e. Ship as chilled specimens the same day collected or freeze sera for later shipment.

f. Pack serum tubes to prevent breakage; wrap in paper towels, bubble wrap, etc. Place in an insulated shipping container with enough frozen gel pack refrigerant to keep the samples cold during transit. Sera must be shipped in watertight primary and secondary containers.

g. Ship samples by a carrier that will deliver them within 48 hours.

2. Rabies Antibody Assay

a. Refer to the recommendations of the Immunization Practices Advisory Committee (ACIP) on rabies serological guidelines (MMWR, 22 Mar 91). Veterinarians, animal control personnel and wildlife officers working in areas where rabies is epizootic should receive pre-exposure rabies prophylaxis and have a serum sample tested for the rabies antibody every 2 years or receive a booster.

b. Submit the sample with request form SF 557, Miscellaneous Form. Ensure complete patient and submitting station identification is on the form.

3. Ehrlichia and Babesia Sera

a. Submit Military Working Dog sera for Ehrlichia and Babesia (*E. canis, B. canis, B. gibsonii*) serological testing to the Fort Sam Houston laboratory. Label appropriate serum tube with dog's name and tattoo number.

b. Submit samples with request form "Military Working Dog Serological Test Request/Report". Fill the form out completely.

c. Sera from overseas, which may be delayed in shipment, may be preserved for

unrefrigerated shipment by adding one drop of Thimerosal tincture, USP, 1:1000, NSN 6505-00-128-5705, per mL of serum.

4. Lyme Disease Send sera to the Fort Sam Houston laboratory. Use MWD Serological test request form .

5. Equine Infectious Anemia (EIA)

a. Submit serum specimen with **completed** USDA Form VS 10-11, Sep 1984, EIA Test Report. Forms are available from regional offices of USDA, APHIS, Veterinary Services. A copy of each test report is sent to the State Veterinarian and Federal Area Veterinarian.

b. Only horses maintained on military installations will be tested.

6. Wildlife Disease Surveys

a. Serological testing in support of wildlife disease surveys requires a current protocol signed by the MACOM and the Director, DOD Veterinary Laboratory.

b.Contact the laboratory regarding the appropriate test request form.

c.Routine wildlife disease surveys are performed as workload permits

7. Specimens for Isolation of Leptospira

a. Media and specific directions/instructions will be provided upon request and can normally be delivered within 24 hours from the Fort Sam Houston laboratory.

b. Urine is toxic to leptospires and must be cultured within 1 hour for successful isolation.

c. Collect blood specimens for culture in vacutainer tubes containing potassium oxalate (gray top tube) or sodium heparin (green top tube) anticoagulant. Culture specimens the same day.

d. Collect urine and blood specimens aseptically. Inoculate 1 mL into 9 mL of Reheis's Prepared Leptospiral Medium (PLM); mix well and transfer 1 mL of this 1:10 dilution into a second tube of PLM. Mix well and transfer 1 mL of this 1:100 dilution into a third tube of PLM, making a 1:1000 dilution.

e. Incubate inoculated tubes at 28-30°C or room temperature until shipped.

f. Pack the tubes to prevent breakage and ship in an insulated shipping container. DO NOT USE ANY REFRIGERANT because cold temperatures destroy the organisms.

8. Other Antibody Assays Performed

a. Toxoplasmosis, Rocky Mountain Spotted Fever, and brucellosis serum tests.
b. Collect acute and convalescent serum samples.
c. Submit with request form SF 557, Miscellaneous Form.

FAVN

LABORATORY REQUIREMENTS FOR OIE-FAVN TEST FOR IMPORTATION OF DOGS AND CATS INTO HAWAII

In order to expeditiously process and test serum from dogs or cats bound for Hawaii and expecting to qualify for the 30-day quarantine, the DOD Veterinary Laboratory requires the following material and information:

1. Only samples from animals belonging to DOD personnel with PCS orders or RFO (Request for Orders) to Hawaii will be provided this service, presently at no charge. **A photocopy of the member's military orders should accompany the serum to be tested.**

2. One milliliter (1.0 ml) of clear, non-hemolyzed serum should be submitted, preferably in an unbreakable cryotube or vial. Additionally, a purple top (EDTA) pediatric tube (1.0 ml) of whole blood should be submitted. These vials/tubes should be sent refrigerated, not frozen, **via a next day delivery service**.

3. Each tube of serum and blood must be identified with the microchip number, obtained from the Hawaii State Agriculture Department, for the animal from which the specimen was collected. ***Note:*** ***To allow ample time for an immune response to vaccination to develop, serum for testing should be collected 3 to 4 weeks after vaccination, not at the time of vaccination.***

4. Enclosed is the official request form to be used. One form for each animal to be tested should be filled out completely (typed or neatly printed), signed by the attending veterinarian, and sent along with the specimens from that animal. Please use the bar code labels, provided by Hawaii, with the microchip number on them to identify each serum or blood sample. A microchip bar code label may also be affixed to the form where the microchip number is requested.

5. Samples **should not** be sent to the laboratory to arrive on the weekend or federal holidays. Send the above information and specimens to:

DOD VETERINARY LABORATORY
ATTN: MCVS-SCL-D
2472 SCHOFIELD ROAD, BLDG 2632
FORT SAM HOUSTON, TX 78234-6232

6. For further information call commercial: (210) 916-7904 or DSN: 429-7904.

GUIDELINES FROM THE STATE OF HAWAII

SPECIFIC PRE-ARRIVAL REQUIREMENTS TO QUALIFY FOR 30-DAY QUARANTINE

The following requirements shall be met to qualify for thirty-day quarantine:

1. Rabies Vaccinations

A **minimum of two (2) rabies vaccinations** not less than 6 months apart with an approved monovalent inactive rabies vaccine. *If the animal has already had more than 2 rabies vaccinations, see item 1.b.*

a. The first vaccination shall not be given to animals less than 3 months of age;

b. The second or most recent vaccination shall be given no less than 90 days and no more than 12 months before arrival;

c. The product name, serial or lot number, expiration date and route of administration information for the two most recent rabies vaccinations shall be ***recorded on the health certificate***.

2. Electronic Microchip Identification

The **Department of Agriculture will issue an official microchip** to be implanted in all quarantined dogs and cats. Microchips must be obtained from the Department of Agriculture. It is the owner's responsibility to have the microchip implanted by a veterinarian and ensure the microchip number is recorded on the blood sample submitted for rabies testing. ***The microchip number must be included on the results of the rabies test.*** Animals already having an implanted microchip are still required to have an official ***State of Hawaii issued microchip*** to qualify for 30-day quarantine. **NO EXCEPTIONS !**

Microchip order forms may be ordered from the Division of Animal Industry in writing at: 99-941 Halawa Valley Street, Aiea, HI 96701; by faxing (808) 483-7110; or calling (808) 483-7100.

3. OIE-Fluorescent Antibody Virus Neutralization Test (OIE-FAVN test)

A rabies blood test is required before arrival to qualify for 30-day quarantine. The testing laboratory must submit the test results directly to the Animal Industry Division, 99-941 Halawa Valley Street, Aiea, HI 96701.

a. The OIE-FAVN test must be conducted **not less than 90 days and not more than 12 months prior to arrival**. A result of 0.5 IU or greater is required. The day the test is performed by the laboratory is the beginning date for the 90-day count down.

b. **To be considered valid**, the test results must include the number of the implanted Hawaii issued michochip and a complete description of the animal (age, sex, breed, color or color pattern, any visible unique identifying characteristics, etc).

c. A **sample of whole blood cells** must also be submitted to the testing laboratory. This can be accomplished by having your veterinarian submit the sample in a 1 to 3 milliliters heparinized or EDTA blood collection tube. The testing laboratory shall hold the blood sample until 120 days after arrival of the animal into Hawaii.

POST-ARRIVAL REQUIREMENTS TO QUALIFY FOR 30-DAY QUARANTINE

To qualify for 30-day quarantine, a post-arrival rabies blood test (OIE-FAVN) is required. Owners are required to submit **a signed consent form** allowing the State to collect a blood

sample under sedation if necessary. Private veterinarians will be allowed to collect blood for OIE-FAVN testing only at the quarantine station by appointment.

X **Only ONE post-arrival OIE-FAVN test is performed.**

HEALTH CERTIFICATE

A Health Certificate issued by an accredited veterinarian within 14 days of arrival is required. The health certificate must be written in English, be an original document, which is not a facsimile, or photocopy and bears an original or carbon signature, and contain the following:

1. A complete description of the animal including age, marking, sex, breed and any additional identifying characteristics.
2. Certification that animal is free of any evidence of infectious or contagious disease.
3. All required vaccinations must be recorded on the health certificate. For rabies vaccinations, the name of the vaccine, lot/serial number, expiration date and route of administration must be included. **To qualify for 30-day quarantine**, list the required information on the two (2) most recent rabies vaccinations.
4. The State of Hawaii issued microchip number and date of implantation.
5. A statement indicating the animal is free of external and intestinal parasites and was dipped, sponged, sprayed, or dusted for external parasites within 14 days of arrival. List the name of the insecticide and give the date of treatment.
6. The results of a heartworm test.
7. Certification by the issuing veterinarian to the accuracy of the information stated on the health certificate.

LABORATORIES WHERE THE PRE-ARRIVAL OIE-FAVN TEST IS AVAILABLE:

Kansas State University
Attn: Dr. Deborah J. Briggs
Department of Pathobiology/Diagnostic Medicine
1800 Denison Avenue
Manhattan, KS 66506-5600.

For information on procedures please have your veterinarian call (913) 532-4455.

Military Personnel Only:

DOD Veterinary Laboratory
Attn: MCVS-SCL-D (FAVN)

2472 Schofield Road, Bldg 2630
Fort Sam Houston, TX 78234-6232.
210) 916-7904

Food Chemistry: General

TEST	METHOD	TYPE OF SAMPLE
Acidity	Titrimetric	Cream, BM, sour crm, yogurt, sherbet, beverages
Added water	Calc using freezing pt and TS	Whole milk
Aflatoxins	TLC or HPLC	Cheese, foods, feeds
Alcohol	Gravimetric or GC	Alcoholic beverages (beer, wine)
Ammonia contaminated	Colormetric	Waterfood, refrig/fzr ammonia food
Antibiotics	CHARM II	Dairy, meat, fish, feeds
Ash	Muffle furnace	Food
Aspartame	HPLC or TLC	Soft drinks, fruit juices, foods
Brix value	Hydrometer or digital refractometer	Beverages, fruit juices, fruit syrups
Cereal(starch, soybean, flour, soy protein)	Alcoholic KOH	Meat products
Chlorinated hydrocarbons (perchloroethylene)	GC/MS	Vegetable oils and other foods
Crude fiber	Acid/alkali digestion	Cereals, feeds
Diamines (putrescine, cadaverine)	HPLC or GC	Meats, waterfoods, cheese
Dry milk in meat	Colormetric	Meat products
Fat, butterfat	Roese-Gottlieb	Dairy products
Fat, butterfat	Acid hydrolysis	Cheese, fish, feeds
Fat, meat	Soxhlet extraction	Meat products
Foreign material	Physical exam, GC/MS	Food
Free Fatty Acids	Titration	Butter, margarine, shortening, veg oil, dry/dehydrated food containing fat

Freezing point	Cryoscope (thermistor)	Whole milk
Headspace gas (O2)	GC	Gas packed foods, hermetically quantitative sealed
Headspace gas (N2)	GC	Gas packed foods, hermetically quantitative sealed
Headspace, mm	Measurement	Canned foods
Homogenization	Fat Analysis	Homogenized milk
Hydrocarbons (gasoline)	See Foreign Material	Foods
Hypochlorites	Colorimetric	Milk
Indole	GC	Waterfoods
Leak dye test	Zyglo passive	Cans, MRE pouches
Malonaldehyde (TBA value)	AOAC Method	Food with fat
Metals (iron, tin, lead)	ICP	Canned food, water, feeds
Milk-solids-not-fat	AOAC Method	Milk, cream, buttermilk, eggnog
Moisture	Gravimetric, forced air oven	Food
Moisture	Gravimetric, vacuum oven	Cheese, feeds
Mycotoxins	TLC or HPLC	Food
Net volume	Volumetric	Liquid food
Net weight	Grammetric	Food
Nitrates	HPLC	Cured meat, fish
Nitrites	HPLC	Cured meat, fish
Organoleptic	Odor, appearance, taste	Food
Platability	Sensory panel	Food
Percent fill (hdsp)	Measure net headspace	Non-dented canned foods
Percent fill (label)	Weigh or measure volume	Non-dented canned foods
Peroxide value (rancidity)	KI & Na thiosulfate titration	Food with fat

Pesticides, carbamates	GC/MS	FFVs, dairy products, other foods
Pesticides, chlorinated	GC/MS	FFVs, dairy products, other foods
Pesticides organophosphates	GC/MS	FFVs, dairy products, other foods
Pesticides, PCBs	GC/MS	Food
Phosphatase	Scharer Rapid	Dairy products
Phosphatase reactivation	Scharer Rapid	Dairy products
Phosphate	Gravimetric	Meat products
pH	Electrometric	Food
Popcorn Volume	Pop Test	Popcorn
Pressure	Pressure gauge	Canned food
Protein	AOAC Method	Food, feeds
Protein-Reducing substance	Spectrophotometric/	Reconstituted milk
Saccharin	HPLC	Soft drinks, juices
Salt (NaCl)	Volumetric	Meat, cheese, butter, other foods
Scoville heat units	HPLC	Hot sauce
Sediment	Filter paper discs	Milk, other liquids
Serviceability	PV, pH, vitamins B1 & C, vacuum	Combat rations (MRE, Tray Pack)
Shelf-life	AOAC Methods	Canned products, frozen meats, dry foods
Sieve test	Sieve	Soup, seasonings
Soybean, soy protein	Alcoholic KOH	Meat products
Sulfas) (sulfamethazine	HPLC/Charm II	Milk, meat
Sulfide	Titration	Drinking water
Sulfite/ Sulfur dioxide	Colorimetric or distillation	Meat, shrimp, dried fruits, wine

Sugar	Brix hydrometer or Digital refractometor	Fruit juices, beverages, and fruit syrups
Sugar	HPLC	Salad dressings, molasses
Thiobarbituric acid value	See malonaldehyde	
Total solids	Gravimetric-forced air oven	Milk, cream, buttermilk, eggnog
Total solids	Refractometer	Jams, jellies, fruits juices
Trimethylamine	HPLC	Waterfood
Vacuum	Vacuum gauge	Canned food
Vitamins		
A	HPLC	Milk, margarine, vitamin supplements
B1 (thiamine)	HPLC	MRE peanut butter and cheese spread
B2 (riboflavin)	HPLC	Vitamin supplements
B6 (pyridoxine)	Spectrophotometric/ colormetric	Vitamin supplements
C (ascorbic acid)	HPLC Colormetric	Fruit juice, beverage base, MRE cocoa beverage powder
D	HPLC	Milk and vitamin supplements
E	GC or HPLC	Vitamin supplements
Niacin	Spectrophotometric/ colormetric	Vitamin supplements
Volatile acids	GC	Meat and fish products
Water Activity	Water Activity meter	Low moisture foods
Whey protein nitrogen	Spectrophotometric	Nonfat dry milk

Food Chemistry: Shortening, Fats and Edible Oils

TEST	METHOD	TYPE OF SAMPLE
Alpha monoglycerides	AOCS method	Shortening
Fat stability	AOCS method	Shortening
Free fatty acids	AOCS method	Shortening, fats, oils, cream substitutes
Iodine value	AOCS method	Shortening
Linolenic acid	AOCS method	Shortening and salad dressings
Lovibond color	AOCS method	Shortening
Moisture & volatile matter	AOCS method	Shortening
Peroxide value	AOCS method	Shortening
Smoke point	AOCS method	Shortening
Solid fat index	AOCS method	Shortening
Wiley Melting Pt	AOCS method	Shortening

Food Microbiology: General

TEST	METHOD	TYPE OF SAMPLE
Aerobic plate count mesophilic	Pour plate culture 35°C 48h	Any food
Canned/Packaged Food Low-acid	FDA Methods	Canned/Packaged Food pH above 4.6
Canned/Packaged Food Culture-High Acid	FDA Methods	Canned/Packaged Food pH 4.6 or below
Canned/packaged food exam	Physical Examination	Canned/packaged foods
Container Exam	Incubator 35°C, 55°C	Canned or hermetically sealed food
Coliform count pres	VRB pour plate culture 32°C 24h	Dairy products
Coliform ct or MPN conf	BGB tubes 32°C 48h	Dairy products with added sugar or salads
Coliform count water	Membrane filtration-M-Endo medium	Bottled drinking water
Coliform MPN presumptive	LST tubes 35°C 48h	Prepared salads, sandwiches, meals, ground meat
Direct Microscopic Somatic Cell Count	Microscopic	Raw milk
Direct Microscopic Count	Microscopic	Food
Direct Microscopic Exam	Crystal violet/gram stain, phase contrast,LPC B stain	Food
E. coli ct or MPN pres	EMB streak plate culture 35°C 24h	Salads, sandwiches, meals, dehydrated foods, cheese, meats, waterfoods
E. coli ct or MPN conf	Biochemical ID	See E. coli count or MPN presumptive
Enterococcus ct pres	KF strep agar pour plate 35°C 48h	Cheese, ham, butter, frozen or pasteurized animal products
Enterococcus ct confirmed	BHI 35°C 24h, stain & catalase,	See Enterococcus count presumptive

	BHI-6.5% NaCl broth 35°C 72h, bile-esculin agar 35°C 24h	
Environmental swabs or sponges	APC, coliform count, fecal coliform count, E. coli count, Salmonella, Listeria monocytogenes	Food contact surfaces
Fecal coliform MPN	EC tubes 45.5°C 48h	Raw ground meat
Fecal streptococci	Mem filter-KF strep agar	Bottled drinking water
Gram stain	Gram stain, 18-24h culture	Food
Halophilic microorganisms	TSA+NaCl spread plate 7°C 10d, TSA+NaCl spr plate 7 & 25°C 10d	Fish, salted vegetables Shell fish
Heterotrophic Plate Count	pour plate	Bottled drinking water
Keeping Quality	Preliminary Incubation 21 C @25h	Dairy Products
Lactobacillus count	LBSA spr plate 20-28°C 7-14d LBSA spr plate 32°C 4 day LBSA pour plate 32'C 72h	Salad dressing Pickled vegetables Meat
Leak test dye	Zyglo	UHT package
Lipolytic count	Lipo agar pour plate 20-25°C 3-4 days	Cream, butter, margarine, salad dressing
Osmophilic plate count	MY-40 pour plate agar 30°C 48h	High sugar foods (honey, jam, molasses, chocolate)
Proteolytic count	PCA pour plate w skim milk 21°C 72h, or 35°C 48h	Butter, meat, poultry and fishery products
Pseudomonas aeruginosa	Mem filter-selective culture	Bottled water
Psychrotropic plate count	PCA pour/spread pl 21 c @ 72 h	Other refrigerated foods
Standard Plate Count	PCA pour plate culture 32°C 48h	Dairy products
Sulfite-reducing anaerobes	Membrane filter-sulfite agar	Bottled water
Yeast and mold counts	PCA+antibiotics pour plate	Prepared salads, cottage cheese, yogurt,

	20-25°C 5 days	sour cream, butter, margarine, cheese
Yeast and mold ID	Mold: SDA culture, col morph LPCB stain, micro exam	Any food
	Yeast: SDA culture, Minitek carbon assimilation	Any food
Xerotolerant molds	MY-40 or PDA acidified w/tetracycline 20-28°C 3-5 days	Foods with low (0.65-0.75) water activity, salad dressing, mayonnaise

Food Microbiology: Food Pathogens

TEST	METHOD	TYPE OF SAMPLE
Aeromonas hydrophila	FDA method	Refrigerated meats, waterfoods, water
Bacillus cereus presumptive	MYP spread plate 30°C 24h	Cereals, rice, food containing corn starch
confirmation	FDA method (biochemical)	See Bacillus cereus count presumptive
Campylobacter jejuni	FDA method	Meat, poultry, raw milk, water
Clostridium botulinum isolation	FDA method	Foods packed under anaerobic condition
Clostridium perfringens isolation	FDA method	Meat, poultry
alpha toxin	Hemolysin plate, reverse passive LA	Meat/poultry
Enteropathogenic *E. coli* count (*E. coli* O157:H7)	EC 35°C 24h, MSA 42°C 48h, EMB, Vitek, antisera; ELISA	Salads, sandwiches, meat, poultry, cheese
Listeria monocytogenes isolation	FDA/USDA methods	Ready-to-eat salads, sandwiches, meats,
Salmonella isolation	FDA method	Egg products, meats, dry milk, confectionery products
Shigella isolation	FDA method	Raw vegetables, water
Staphylococcus aureus count	Baird-Parker spread plates 35°C 48h + coagulase	Meat, poultry, ham, fermented meat, cheese, dry milk, cream-filled pastries
enterotoxin	ELISA or reverse passive latex agglutination	Any food
thermonuclease	Toluidine blue agar 37°C 4h	*Staphylococcus* culture
Vibrio cholera isol	FDA method	Marine waterfoods (fresh), water
V. parahemolyticus isol	FDA method	Marine waterfoods (fresh), water
Yersinia enterocolitica isolation	FDA method	Meats, fish, vegetables, water, fresh dairy products

Food Categories and Test Panels

PRODUCT	TESTS
Bottled water	APC, coliforms, *P. aeruginosa*, fecal streptococci, sulfite-reducing anaerobes
B-rations (general)	Vacuum, leak dye, oxygen, odor, appearance, moisture, peroxide value
B-rations (green peppers)	See B-rations (general) + sulfite
B-rations (chili con carne and shrimp)	See B-rations (general) + APC and E. coli MPN
B-rations (egg mix)	See B-rations (general) + APC, coliform count, *Salmonella*, copper, palatability
Bread	YMC, odor, appearance, taste, sodium (if low), total solids
Butter	Microbiological: coliform ct, YMC, proteolytic ct, lipolytic ct, enterococcus ct Chemical: butterfat, moisture, salt, curd, free fatty acids
Buttermilk	Microbiological: coliform count Chemical: phosphatase, fat, milk-solids-not-fat, acidity, pH
Canned foods	Commercial sterility/spoilage (aerobic & anaerobic cultures 35°C & 55°C), DMC, physical exam, vacuum/pressure, pH, dye leak, net weight/volume, headspace gas, net headspace, percent fill, appearance, odor Hydrogen swell: vacuum/pressure, headspace gas, metals (iron and tin)
Cheeses	Microbiological: fecal coliform ct, EEC ct, enterococcus ct, YMC, *S. aureus* ct Chemical: fat, moisture, phosphatase, salt, pH, aflatoxins, diamines
Confectionery products	*Salmonella*
Cosmetics (skin,hair,baby)	Microbiological cultures
Cottage cheese	Microbiological: coliform count, YMC Chemical: phosphatase, fat, moisture, pH
Cream (heavy, light, half)	Microbiological: standard plate count, coliform count, lipolytic count Chemical: phosphatase, acidity, fat, total solids (half)
Dairy, fresh fluid, noncult	Microbiological: standard plate count, coliform ct, YMC, antibiotics,

	keeping quality Chemical: phosphatase, fat, total solids, solids-not-fat, pH, acidity, added water/freezing point, hypochlorites, protein reducing substance, vitamins A & D
Dry Feeds	Microbiological: APC, coliform MPN, *E. coli* MPN, *Salmonella* Chemical: crude fat, moisture, crude protein, ash, crude fiber, Ca, P, Na, pesticides, aflatoxins, diethylcarbamazine, free fatty acids, NFE
Eggs, dehydrated	Microbiological: Standard plate count, coliform count, *Salmonella*, moisture
Food, foodborne outbreak	Tests which correlate with signs & history, e.g., bacterial isolation, ID & count, toxin, and heavy metals, mycotoxins, histamine. Virus identification may be referred to Med Res Dev Cmd on special occasions.
Food, general, off-condition	Organoleptic and appropriate chemical indices of off-condition, microbiological evaluation, industrial chemical residues.
Foods, prepared, RTE	APC, coliform MPN, fecal coliform MPN, *E. coli* MPN, *S. aureus* count, *C. perfringens* count, *Salmonella*, *Listeria monocytogenes*, YMC
Fruits, dried	Microbiological: APC, coliform MPN, fecal coli MPN, YMC, xerotolerant fungi Chemical: sulfur dioxide, moisture, water activity
Fruits & vegetables, fresh	Pesticides, sulfur dioxide
Fruit juices/drinks	APC, YMC, osmophilic plate count Chemical: pH, acidity, Brix value/sugar, ascorbic acid, aspartame, total solids, insoluble solids
Ice	Microbiological:APC, coliform MPN, *E. coli* MPN, salt, chlorine
Ice Cream	Microbiological: standard plate count, coliform count, *S. aureus* count, *Salmonella* Chemical: phosphatase, fat, milk-solids-not-fat, acidity (sherbet)
Margarine	Microbiological: lipolytic count, coliform count, YMC Chemical: fat, moisture, salt, vitamin A, free fatty acids
Meat, raw, ground	Microbiological: APC 20°C 72h, fecal coliform MPN Chemical: fat, soy flour, soy protein, diamines, dry milk, sulfites, malonaldehyde/TBA, pesticides, volatile acids, antibiotics
Meats, processed	Microbiological: lactobacillus count, *S. aureus* count, meat species ID Chemical: nitrates, nitrites, peroxide value, phosphate, salt
Milk, dried	Microbiological: standard plate count, coliform count, *Salmonella*, *S.*

	aureus count, *Listeria* Chemical: fat, solubility index, phosphatase, acidity, moisture, whey protein, nitrogen, scorched particles
MRE rations	Serviceability: pH, peroxide value, vitamins C and B_1 in cheese spread and peanut butter, organoleptic, dye leak test Commercial sterility: aerobic and anaerobic cultures, pH, DMC, dye leak test
Popcorn, unpopped sprouted,	Moisture, popping test, YMC, YMC ID, appearance, % germinated & insects
Poultry, raw	APC 20°C 72h, fecal coliform MPN, *Salmonella*, *Campylobacter*
Salad dressing, mayonnaise	Microbiological: lactobacillus count, lipolytic count, YMC Chemical: pH, acidity, peroxide value, free fatty acids, appearance,
Salads, sandwiches, Spreads	APC, coliform MPN, fecal coliform MPN, *E. coli* MPN, *S. aureus* count, *Salmonella*, *Listeria monocytogenes*, YMC-- pH & B.*cereus*(salads)
Soft drinks	Microbiological: APC, YMC Chemical: Aspartame, saccharin, pH, acidity, pressure, odor, Brix
Soft serve ice milk	Standard plate count, coliform count
Sour cream	Microbiological: coliform count, YMC Chemical: phosphatase, fat, acidity, pH
Tray rations	Commercial sterility: aerobic and anaerobic cultures, pH, DMC, dye leak test, headspace gas analysis, appearance Serviceability: pH, dye leak test, seam tear-down analysis, net wt, organoleptic
UHT milk	Aerobic plate count, anaerobic plate ct, DMC, pH, dye leak, appearance
Waterfoods	Microbiological: APC, fecal coliform MPN, *V. parahaemolyticus*, *Salmonella* Chemical: ammonia, diamines, indole, trimethylamine, metals (Hg, Pb, Se), sulfites, total volatile basic nitrogen, volatile acids, histamine
Yogurt, chilled	Coliform count, YMC, fat, acidity, pH
Yogurt, frozen/ soft serve	Coliform count, YMC, acidity, pH

Animal and Zoonotic Disease Diagnostic Tests

TEST	METHOD	TYPE OF SAMPLE
Babesia canis titer	Indirect fluorescent antibody	MWD serum
Babesia gibsonii	Indirect fluorescent antibody	MWD serum
Brucella canis titer	Slide agglutination Tube agglutination	Dog serum Dog serum
Brucella abortus titer	Slide agglutination Tube agglutination	Serum Serum
Ehrlichia canis titer	IFA	MWD serum
Equine infectious anemia	Agar Gel Immunodiffusion (AGID) and ELISA	Horse serum Horse serum
Leptospirae detection	Dark field examination	Human and animal urine
Leptospirosis isolation	Culture	Human and animal urine, blood
Leptospirosis titer	Indirect Hemagglutination Macroscopic agglutination Microscopic agglutination	Human and animal serum Human and animal serum Human and animal serum
Lyme Disease titer	IFA	MWD serum
Q-Fever	IFA	Human serum
Rabies antibody titer	Rapid Fluorescent Focus Inhibition Technique (RFFIT)	Human serum
	Fluorescent antibody virus neutralization (FAVN)	Canine serum
Rabies virus detection	Fluorescent antibody Neuroblastoma cell culture	Brain tissue Brain tissue
Rocky Mountain Spotted Fever and Typhus groups	IFA	Human and MWD serum
Toxoplasmosis titer	Indirect Hemagglutination	Human serum

Foodborne Illness

CONTACT THE MICROBIOLOGY SECTION OF THE LABORATORY PRIOR TO SHIPPING ANY FOOD POISONING/FOODBORNE ILLNESS SAMPLES.

Submit all requests for food poisoning/foodborne illness testing on MEDCOM Form 676-R. Refer to Appendix 1 for sample form and completion instructions.

A foodborne illness is an incident in which **TWO OR MORE** persons experience a similar illness after ingestion of a common food.
EXCEPTION: One case of botulism or chemical toxicosis constitutes an outbreak of foodborne illness.

Samples may be shipped refrigerated or frozen depending on the circumstances. Normally samples are sent refrigerated if submitted soon enough.

Submit food which is EPIDEMIOLOGICALLY implicated (i.e., samples of actual food eaten, if available). The specific laboratory tests and the order in which they are conducted will be determined by the clinical signs, symptoms, the incubation period and other pertinent facts.

The following information and samples are required:

1. Food attack rates for each food eaten or suspect meal(s):

   a. Total number of people who consumed the suspect meal(s) or food.
   b. Number of people who consumed the suspect meal(s) or food and became ill.
   c. Number of people who consumed the suspect meal(s) or food and did not become ill.
   Note: Foods eaten 72 hours prior to symptoms should be considered.

2. Predominate symptoms, such as nausea, vomiting, diarrhea, fever, chills, headache, dizziness.

3. Incubation period: time from ingestion to appearance of symptoms.

4. Duration of symptoms.

5. Physician's diagnosis and any medical treatment given.

6. Laboratory results on cultures of clinical specimens; stool and/or vomitus.

7. Reports of any mishandling of the suspected food.

8. Chill and ship suspected samples (bulk foods, food in open containers, and clinical specimens) in separate sterile containers. Submit a minimum of 100 grams of each sample or entire specimen if less than 100 grams. Submit food sample swabs (Culturettes^{R}) in transport growth medium.

9. Operational (MRE) rations: Submit any leftover suspected components and six unopened components of the same meal and sublot.

INSTRUCTIONS FOR THE COMPLETION OF MEDCOM FORM 676-R "REQUEST FOR VETERINARY LABORATORY TESTING"

GENERAL -- One legible copy of the form must accompany any sample(s) submitted to a Veterinary Laboratory for analysis. Like samples from the **same source** (vendor) may be included on one form. Use separate forms for samples requiring different shipping environments (room temperature, frozen, chilled) even if they are from the same vendor.

ITEM 1 -- Enter the complete address for the laboratory to which the sample is being submitted.

ITEM 2 -- Enter the submitting station's complete address, including zip code. Include an E-mail/cc:Mail address for electronic return of completed reports. Fill in the submitting station's six digit station identification code number in the blanks provided.

ITEM 3 -- Enter the name of the person submitting the sample or the individual who would have knowledge about the sample if the laboratory requires additional information. Include a phone number where that individual can be contacted. The individual should sign in the area provided.

ITEM 4 -- Enter the complete name and address for the product's producer (manufacturer, packer, vendor, etc.). Include any pertinent contract numbers or purchase order numbers.

ITEM 5 -- Enter the general type of sample being submitted (dairy, sandwiches, ground beef, ice cream, cheese, etc.)

ITEM 6 -- Enter the reason for submittal: sanitary inspection (routine or special), customer complaint, QAV, AR 40-70 verification, contract verification (COC), wholesomeness, etc. If the sample is being submitted for analysis of a causative agent in a possible foodborne illness (food poisoning) CONTACT THE LABORATORY PRIOR TO SUBMISSION.

ITEM 7 -- Enter the date the sample was collected/selected for testing (pulled from stock).

ITEM 8 -- Enter the total number of samples being submitted with this form.

ITEM 9 -- Enter the total number of items the sample represents (day's production, # of cases on hand, # of pounds, etc.), if known.

ITEM 10 -- Enter any applicable lot number(s).

ITEM 11 -- Enter any applicable contract specifications and/or amendments.

ITEM 12 -- DO NOT MAKE ANY ENTRIES IN THE FIRST COLUMN. Enter the submitting station's sample number in the second column. Each sample must be given a unique sample number which corresponds with a label placed on that sample. Describe (identify) each sample (whole milk, potato salad, ham/cheese sandwich, cheddar cheese, etc.) in the third column. Use the last column to provide sample information such as the production date, date of pack, can code and any other additional identification. Use the "NOTES" area to list any specific test requirements or to describe "customer complaints". Samples submitted under AR 40-70 will be tested IAW the regulation. Use Page 2 for additional samples and/or notes.

ITEM 13 -- Any shipment of CHILLED samples must include a temperature pilot. The pilot

must be an EXTRA sample similar in type to the sample(s) being submitted for testing. DO NOT GIVE THE PILOT A SAMPLE NUMBER but label the sample as "PILOT". Circle the appropriate response and enter the type of pilot included. Frozen shipments DO NOT need a pilot sample.

ITEM 14 -- Indicate if the final laboratory report is to be sent to an address other than that listed in Item 2 and/or if a copy of the report is to be sent to an additional address.

ITEM 15 -- Indicate if and where the shipping container should be returned.

FOR LABORATORY USE ONLY

ITEM 12 -- Record the LABORATORY SAMPLE NUMBER for each sample submitted.

ITEM 16 -- Record the date and time the sample was received in the laboratory.

ITEM 17 -- Record the temperature, in degrees Celsius, of the pilot submitted with sample. If the shipment is chilled but no pilot is submitted, enter "NP". If the sample is frozen, enter "FZ". If the sample is submitted at room temperature, enter "RT".

ITEM 18 -- Enter the date the shipping container will be shipped back to the submitting station. If the container will not be returned, enter "NR".

ITEM 19 -- Enter the LABORATORY REPORT NUMBER assigned to this request.